

Page total

81

18

(This is such a mess!!)

Re: PE samples for MS027, You can give Samoa packing the ASEPA samples for the other parameters. I hope to be handcarry- ing more samples WP and MS with me for ASEPA and the canneries.

Re: variance for ammonia toxicity, norm asked whether your legal counsel could interpret the standards to have the "substantially free from toxic substances" provision to apply to the edge of the ZOM (that's the way he reads it), thus allowing some toxic substances within the ZOM? (This way you wouldn't need to go through the variance procedure.) Just a thought. If you really need to grant a variance, it's probably best to have the EOC meeting on everything then.

I also here, is the draft permit hot off the printer from Doug. I have, at looked at it carefully yet but his phosphorus and nitrogen numbers are based on the maximum values over the last year, the reasoning being that the loadings are not production based and we can't give them less stringent limits than the previous permit. He's going to talk to his boss about Norm's proposal and get back to us on Wednesday. I'll give you a call tomorrow to discuss further but as you can see it still needs work. He put in 301(h) monitoring scheme, leaving the sampling points open, just to put something in, but we're counting on you guys to tell us what you think is best.

Here's Norm's proposal for calculating the nitrogen and phosphorus limits based on Steve Costa's proposed mass loadings for the mixing zone (it's the total for both canneries; they still have to tell us how they want the limits allocated between themselves). It's pretty clever and I think it will work. We ran some actual numbers for Starkist and I think both canneries totals will fall within the proposed limits.

Sheila:

Tell him/her.

time do we have? or let me know when is a good time.
of your departure (me, Doug, Norm). Is 8:30 a.m. your
we would do pass you info on to you + discuss
canning. Copy of letter will be faxed to you soon, but the
suggested proposed limits for methanol + phosphorus for each
acute toxicity test/unit for ammonia (very high levels) and
askip him to address the issues raised! so will be used for
some problems. Doug is writing letter to state Dept of CH2MHL
with Gumeris, some of mining application + there are
② just met w/Doug later, point writer. He just received the attached
NOTE: ① Enclosed last page of letter to SP

THIS MESSAGE IS 12 PAGES PLUS COVER	
PHONE: (415)744-1591	
OFFICE: USEPA	
FROM: Pat Young	
FAX NO.	PHONE:
ORGANIZATION: USEPA	
TO: Shula Wiegman	

VERITY (415) 744-1596, FTS 484-1596
FAX (415) 744-1604, FTS 484-1604
75 Hawthorne Street
San Francisco, CA 94105
United States Environmental Protection Agency, E-4
Office of Pacific Island and Native American Programs

OPINION FAX TRANSMISSION

As we discussed, letter to State Legis-
lators & Mayor, etc. This is being given to
the 2nd of May, etc.

Steve Tolson.

NOTE:

THIS MESSAGE IS	PAGES PLUS COVER	9
PHONE:	(415) 974-1591	
OFFICE:	USEPA	
FROM:	Latanya	
FAX NO.	(415) 590-3882	PHONE:
ORGANIZATION:	State List	
TO:	Norman West	

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Office of Pacific Island and Native American Programs

OPI NAP FAX TRANSMISSION

PA

problem.

call you later this morning to discuss answers
today re: Zou & Murdy + NPD's application. All
letter + attachments being forwarded to State Coster
NOTE:

THIS MESSAGE IS	
9 PAGES PLUS COVER	
PHONE: (415) 744-1591	
OFFICE: USEPA	
FROM: Pat Young	
FAX NO. _____	
PHONE: (619) 597-4282	
ORGANIZATION: Lan Camp Seattle	
TO: Jim Cox	

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OPI NAP FAX TRANSMISSION

TRANSMISSION OK

*** ACTIVITY REPORT ***

- The initial dilution modeling was, for the most part, appropriate. UDKNHDEN
- The wastewater transport modeling was appropriate, although it was not clear from the information provided how loadings from the utility wastewater treatment plant affected mixing zones) regarding the American Samoa mixing zone study. The most significant aspects of the review are:
- The wastewater transport modeling was appropriate, although it was not clear from the initial dilution modeling was, for the most part, appropriate. UDKNHDEN
- The initial dilution predictions for the 5 cm/s current structures were too high. The majority of simulations deal with the zero current structures; these simulations appear appropriate.
- The study is non-conservative in assuming that ambient concentrations near the edge of the mixing zone are represented by concentrations outside of the harbor. Actual ambient concentrations will likely be higher, and the true amount of dilution lower, than that assumed in the study.
- The far-field transport model used is less appropriate for simulating cases of low current.
- A attainment of water quality standard appears marginal for present loading conditions, and more careful analysis of design criteria should be provided before future expansion capacity is provided.
- feel free to call Steve or me directly with any specific questions you may have.

SUBJECT: American Samoa Mixing Zone Review

FROM: Dave Dilliecc: j. Parker, SAGC
PROJECT: PAGO DATE: 10/28/91
TO: Doug Liden, U.S. EPA

LTI - Limno-Tech, Inc.
Memorandum



dilutiones that are only about one-third those presented. Therefore, I would suggest dilutiones of the same conditions as presented in the mixing zone application, I get some of the same conditions as predicted by the predictions. In running my modified code for laboratory and field data and suggested some minor changes to the code that would significantly improve the predictions. In running my modified code for S.J. Whight, September 30, 1989, 40 pp.), in a comparison of a fairly extensive set of existing version of UDKHDEN (Version of EPA Plume Model UDKHDEN by I prepared a short report for Region II that documented some problems with the dilutions in cases with currents than any of the other EPA plume models. In 1989, I thought that it was fairly common knowledge that UDKHDEN predicts higher since UDKHDEN is the more sophisticated model, it should be correct. I had and UDKHDEN in the simulations with the 5 cm/s current and it is suggested that to the interpretation of the results. There is some discrepancy between UMERGE and UDKHDEN in the interpretation of the results. In general, the application of these models seems appropriate and the only issues that I would raise are with respect presented in the Mixing Zone Application. In general, the analysis used in the feasibility study with only the latter model used in the final analysis in the UDKHDEN model. The USEPA models UMERGE and UDKHDEN were used

submerged waste field as compared to the existing waste discharge. Long term transport may have a depth variation that will result in difference for a and so I would not quarrel with the analysts but simply suggest that the actual such as using only a portion of the water column as an effective depth in the model data are probably inadequate to justify the use of a more sophisticated approach data indicate some vertical stratification in water quality. However, the available averaging surface and at-depth water quality measurements is facilitated by depth-integrated model. The comparison against field observations is facilitated by this issue is addressed in there. The second issue is that the analysts is using a lumped into them or not. I do not have access to the HHS (1989) report and maybe regrating nonpoint discharges and I do not know if this outlet all discharge got these issues should be clarified. In the writeup, there is a discussion on analysts; these issues should be clarified. In the writeup, there is a discussion the loadings from this outlet are significant or if they have been included in the the outlet outlet which is a wastewater treatment plant discharge. I cannot tell if the this model are probably realistic. One major question that I have is with respect to other inputs. In some of the provided figures, there is an outlet referred to as increasing dispersion in the outer harbor appear to be reasonable and the results observed data. The magnitudes of the dispersion coefficients as well as the trend of respect to a tidal period and were estimated by calibration of the model against

Assuming that the analysis of the far field dilution at a current speed near 5 cm/s is accepted, then I think there is a problem still. On p. 25 of the mixing zone application, it is stated that near field dilutions of between 875-1250 are required. Using a more accurate estimate of ambient concentration will result in a doubling or more of these required dilutions as discussed above, so presumably the required dilution is somewhere on the order of 2000 or more. The far field transport model will yield an incremental dilution of about 3-4 (at a distance of 1800 ft from the diffuser), depending upon the specific assumptions employed, based upon hand calculations that I made with the same general analytical procedure employed in the model. This then requires an initial dilution of at least 500, which cannot be

in which C is the initial concentration in the far field model, W is the initial width of the annulus. Making approximate calculations for the waste field thickness and concentration from the initial dilution results gives a result in which $C = C_0$ for $U = 5$ cm/s, thereby justifying its selection, but not for the reasons noted in the report. There are data available from which an estimate of the wastefield thickness can be made, but this really begs the issue of whether the model formulation is a valid one since the ambient current is not tied to an physical occurrence, but instead is what is needed to make the model work; low current cases simply cannot be reasonably modeled with this combination of models.

CWCHU = QC⁸ = SC⁸

Four-Third Transport Model. - This model derives from a conceptual model presented by Brooks which allows for a scale dependent dispersion coefficient. I am assuming that the "four-thirds law" option is used in the analysis although I must equal that arising from the diffuser itself as in

1. The initial surgical surgery procedures should be considered for acute abdominal problems.
By the time of surgery, there should be no consideration by the surgeon best in the common interest.
2. The initial surgical interventions should be considered for acute abdominal problems.
By the time of surgery, there should be no consideration by the surgeon best in the common interest.
3. The initial surgical interventions should be considered for acute abdominal problems.
By the time of surgery, there should be no consideration by the surgeon best in the common interest.
1. The initial surgical surgery procedures should be considered for acute abdominal problems.
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3. The initial surgical surgery procedures should be considered for acute abdominal problems.
By the time of surgery, there should be no consideration by the surgeon best in the common interest.

f. At the station ① Touching contact, I
believe this would be a short-cut.
Does this. If not sure I
will do the connection first.

Let this day + my first I hope this
less not delay present issues.
If I hope I do the same I have
less not do the same I do more
I have I do the same I do more
I have I do the same I do more
I have I do the same I do more
I have I do the same I do more

For our questions, I can call from 9/11-14
to the 1st week in October. This is the time
of the year when we receive most of the
camping trips from the north.

I like especially the Indians & tourists
of the U.S.A. who have been here
and the W.M.F. members from the U.S.A.
I like especially the Indians & tourists

most are met immediately.
a great number still come over
from the same place on returning to their
place of origin most probably

1. The majority of the people can be seen
in the "first" days of their vacation
communities. These are usually
the same as those staying at the
same place.

2. The second most important may be assessed after
the first few days of their vacation
when they have had some experience.

3. The third most important may be assessed
after the development of the study plan, but
this will be later than the first two because
of the difficulty of the study plan's being
done during the day or there being
problems with distribution of the sites for
the return & comments, we have no

I get your press ; will pass through
info others on to Rec. I rememb
all those on the international al
these . as we have such a close
relationship with other countries is an
advantage to us people are very
superior others however is in every
selfishness. These are opposite side - Sordid
I can relate in the conference all i
was trying to be there. (why is the
point that say of ECA training to I have to
get that say of ECA training to I have to
meet with the difficulties & considerations ...
In our discussion is our only
concern is point less just. We only
discussions ; those are CDS, is our
"successes", which still be determined
the US most (which at one
point or ...) as the US say "successes
will be determined by several rea
success = what is ? If success
Virtually, then the language is fine.

- a. Recreational and subsistence fishing!
 - b. Boat-launching ramps and designated mooring areas!
 - c. Subsistence food gathering, e.g. shellfish harvesting!
 - d. Aesthetic enjoyment!
 - e. Whole and limited body-contact recreation, e.g. swimming, snorkeling, surfing and scuba diving.
 - f. Support and propagation of marine life!
 - g. Industrial water supply!

The protected uses of Pago Pago Harbor are as follows:

C. PROTECTED AND PROHIBITED USES

*Should any samples of ambient water reveal exceedances of the standards specified above and should ASEPA and/or USEPA determine that the manneries, discharge is the cause of the exceedance, the canneries may be required to undertake various actions including ceasing discharge and/or additional studies or monitoring to determine the cause of the exceedance. Violations of water quality standards shall be determined in accordance with American Samoa Water Quality Standards.

2. A level of total nitrogen in excess of 200 ug/l; and,
 3. A level of total phosphorous in excess of 30 ug/l.

1. A temperature more than 1.5 degrees Fahrenheit from conditi ons that would occur naturally!

Samples taken at monitoring stations 15, 16, 17, and 18 in the receiving water (those stations outside the zone of mixing (ZOM)) shall not reveal any of the following in accordance with American Samoa Water Quality Standards:

3. Toxicity to aquatic life.

11. Dissolved oxygen (DO) concentration less than 5.0 mg/L; or 70% saturation;
12. Turbidity in excess of 0.75 nephelometric turbidity units; and

Samples taken at monitoring stations 8, 8a, 15, 16, 17, 18 in the receiving water (those stations outside of the zone of initial dilution (ZID)) shall not reveal any of the following in accordance with American Samoa Water Quality standards:

5. Materials that will produce visible turbidity or settle to form objectionable deposits.

4. Visitable floating materials, grease, oil, scum, foam, and other floating material; and,

combinations, or in the biota?

Plan selling ~~and~~ to you.

卷之三

16. 6E-051

1

8. 71 - 41 / 51. 94 - 01

01

• show/tell another person

Believe it or not I feel right

MESSAGE

NOS. OF PAGES 1 INCLUDING ORIGINAL.

TELEPHONE: _____
FAX NO.: _____

FROM Charles W. SEELA

To: *Mr. John Updike*

81/6

in your case.

FAX FORM

AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY

2011-05-10 I - long

- j. Scientific investigation.
- i. Flotating dredges; and
- h. Normal harbor activities; e.g. ship movements,
- g. Marine culture development;
- f. Support and propagation of marine life;
- e. Whole and limited body-contact recreation, e.g. swimming, snorkeling, surfing and scuba diving.
- d. Aesthetic enjoyment;
- c. Subsistence food gathering, e.g.
- b. Boat-launching ramps and designated mooring areas;
- a. Recreational and subsistence fishing;

1. The protected uses of Pago Pago Harbor are as follows:

C. PROTECTED AND PROHIBITED USES

*Should any samples of ambient water reveal exceedances of the standards specified above and should EPA and/or USEPA determine that the canneries' discharge is the cause of the exceedance, the canneries may be required to undertake extreme measures to reduce their discharge to undertake excess discharge. The canneries are allowed one month from the date of exceeding to submit any information, including additional monitoring data, that they wish EPA and NOAA to review in determining the cause of the water quality exceedance(s).

3. A level of total phosphorus in excess of 30 ug/l.
 2. A level of total nitrogen in excess of 200 ug/l; and,
 1. A temperature more than 1.5 degrees Fahrenheit from conditions that would occur naturally;
- The following standards shall not cause*

3. Toxicity to aquatic life.
2. Turbidity in excess of 0.75 nephelometric turbidity units; and,
1. Dissolved oxygen (DO) concentration less than 5.0 mg/l; or 70% saturation;

- The following standards shall not cause*
5. Materials that will produce visible turbidity or settle to form objectionable deposits.
 4. Samples taken at monitoring stations 8, 8A, 15, 16, 17, 18 in the receiving water (those stations outside the zone of initial dilution (ZID)) shall not reveal any of the following in monitoring samples taken at monitoring stations 15, 16, 17, 18 in accordance with American Samoa Water Quality Standards:

Note: "This determination of compliance is in WQS and ZOM permit."

compliance with the American Samoa Water Quality standards for the above parameters shall be determined by utilizing at least 4 consecutive measurements over a time period not less than 3 months or greater than 12 months or at a frequency determined by the USEPA and USEPA. Upon the determination of non-compliance with water quality standards the permittee shall submit a report within 30 days of such determination to USEPA and USEPA regarding the causes of water quality exceedance(s) and actions to be taken.

at all point

Water

Within six months of the effective date of this NPDES permit, the permittee, in cooperation with Samoa Packing Co., shall submit a field study design for approval by ASFEPA. Regulation 9 to assess the potential impact of the discharge on the nearby coral reef. The study shall include coral reef transects which conform to locations found on Figure 4 in the USE ATTAINABILITY AND SITE-SPECIFIC CRITERIA ANALYSES; PAGO HARBOR, AMERICAN SAMOA, FINAL REPORT (CH2M Hill, March 15, 1991). The intent of this annual survey is to detect significant differences, if any, from the database information found in the above-cited document. Video shots shall be submitted to both the USEPA and ASFEPA. Guidance for designing such surveys is provided in the "Design of 301(h) Monitoring Programs for Municipal Wastewater Discharges to Marine Waters," November 1982, EPA #430/0-82-010 (pages 70-71). In addition, the discharges should consist "Ecological Impacts of Sewage Discharges on Coral Reefs Communities," September 1983, EPA #430/9-83-010, for further information. The study shall be conducted within

I. CORAL REEF SURVEY

H. EUTROPHICATION STUDY

After the first two studies have been performed and the results have been assessed the permit may be reopened for implementation of a more frequent or less frequent monitoring schedule. Changes to the frequency of the monitoring

Response: The USEPA's Environmental Support Branch (ESB)

instruments for measuring such low levels of TPC.

USEPA on acceptable analytical procedures and water exists. Additioally, guidance was received from complicate problem with TPC standards in the receiving test these effects and the results used to determine if a for quenching effects on TPC as it travels through the The canneries commented that the TPC limit did not account

2. Monitoring Requirements for Total Residual Chlorine (TPC)

be made any less stringent.

limits. The numerical limitations themselves shall not average" method of measuring chlorine concentration with the the permit may be modified to incorporate a "weighted In the harbor or causally receiving water quality violations, discharge is not significantly affecting the water quality TP limits and should show that the should the canneries consistently comply with their TN and the monitoring requirement will stand as is.

order to lower their monthly average. Thus, allows the canneries to account for non-production days in averaged and does not use weighted averages) and yet still straigh-forward (i.e. all sampling days are totaled and monitoring and calculating monthly averages for TN and TP is monitoring by requiring seven consecutive days of monitoring and calculating monthly averages for

Response: The method proposed in the draft permit for

monthly averages.

calculation production and non-production day loadings for expensive, and that a weighted average procedure be used in It was suggested that this approach was overly conservative. (six days following the monitoring of a non-production day). discharge by requiring seven consecutive days of monitoring provided the option of counting non-production day in the draft permit for monthly averages for TN and TP which The canneries commented related to the monitoring schedule

1. Monitoring for Total Nitrogen (TN) and Total Phosphorus (TP)

Section A. Effluent Limits and Monitoring Requirements

will be addressed together.

on April 22, 1992. These comments pertained to both permits and received from the dischargers through their consultant, CH2MHILL, comments on the draft permits for this facility were

NPDEx Permit No. AS0000019
VCS Samoa Packing Company
Star Kist Samoa, Inc.

NPDEx Permit No. AS0000028

Response to Comments

Comments : 8/27/92
Record to Shuler

The canneries suggested that the dates for these studies be determined during development of the study plans so that the studies would be conducted at the appropriate time, during the two distinct oceanographic seasons. They also suggested that the second study reevaluate current research upon an assessment of the first study's results.

Section F. Dye or Tracer Studies

The canneries requested that the permit include the possibility of modification/elimination of monitoring stations, with appropriate review, after the first year of monitoring. They felt that if the first year of monitoring indicated that water quality standards were being met throughout the harbor, then only those stations in and at the edge of the mixing zone would be needed to monitor compliance.

Response. The number and location of stations is important to assess farmland distribution. Therefore, a greater number of stations is beneficial both to the regulation of sampling stations and to the canneries. The number and location of sampling stations is assessed from a water quality exceededance and to to assess the cause of a water quality exceedance and to to assess farmland distribution. Therefore, a greater number of stations is beneficial both to the regulation of sampling stations and to the canneries.

Section E. Receiving Water Quality Monitoring Program

The canneries requested that the language of Part 3 (Toxicity Reopener) to add sentence of Part 3 (Toxicity Reopener) to modifed to add the word "maternal", so that it would read, "Should any of the monitoring indicating indicate that the discharge causes, has reasonable potential to cause, or contributes materially to an excursion above a water quality criteria,"

Response. The language in the proposed permit is a direct implementation of American Samoa's water quality standards.

The language shall remain as stated.

Section D. Toxicity

The canneries felt that the permit language should specify that this section applied to their discharge as they should not be held responsible for other parties engaging in prohibited uses of the harbor.

Section C. Protected and Prohibited Uses

MESSAGE

NOS. OF PAGES 1 INCLUDING ORIGINAL

TELEPHONE: _____
FAX NO.: _____

John, 6/10/44

DATE: 1/8

11

FAX FORM

AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY

The sun my compasses no point
Our father who art in heaven
Hallowed be thy name
Thy kingdom come
Thy will be done
On earth as it is in heaven

4. An Up Marketing Strategy - It's time to
communicate more effectively with their
customers through marketing & advertising.
This means I don't think it's the
best strategy to sell more because
it's not effective. Instead, I think
examples such like social
media or digital marketing should
be used instead of selling
products to customers.

3. An Retailer is Profitable Days -
Customers buy products from us
because we have an excellent service.
We sell products by giving
discounts, offers, and promotions.
Retailers are also influenced by
advertisements and social media.
By giving discounts, we can
attract more customers to our
store. This is a good way to
increase sales and profit.

1. An Tie IP Capital Recovery - It is
the most common method of capital
recovery. It is "negative".
It is based on the amount of
interest on the loan if the amount
to be repaid is less than the amount
of the loan.

Comments on NIDES Plant - Comments -
↳ Comments to Customers

useful are comments on the assess local
processes permit responses to communities. Local
we see any measures changes to this
process before they become final?

Thanks.

MESSAGE

NOS. OF PAGES 2 INCLUDING ORIGINAL

TELEPHONE: _____ FAX NO. _____

FROM Shelley KEPFATO: Fax American SamoaDATE: 8/6/92

FAX FORM

AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY